



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/779,674	02/18/2004	Yi-Fang Chou	0941-0918P	8543
2292 7590 12/21/2007 BIRCH STEWART KOLASCH & BIRCH PO BOX 747 FALLS CHURCH, VA 22040-0747			EXAMINER NGUYEN, HANH N	
			ART UNIT 2834	PAPER NUMBER
			NOTIFICATION DATE 12/21/2007	DELIVERY MODE ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

mailroom@bskb.com

Office Action Summary	Application No.	Applicant(s)	
	10/779,674	CHOU ET AL.	
	Examiner	Art Unit	
	Nguyen N. Hanh	2834	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 July 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-7,9-18 and 20-23 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-7,9-18 and 20-23 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 24 July 2007 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Remarks

1. In view of amendments and Applicant's arguments, the Examiner withdraws the objections to the drawings, the objections to claims 11, 22 and the rejections under 35 USC 112, first paragraph to claims 17&18.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-3,5,6,9,12-14,16,17 & 20 are rejected under 35 U.S.C. 102(b) as being anticipated by Watanabe et al. (JP 8-205450, previously cited).

With respect to claims 1 & 12, Watanabe teaches a fan assembly comprising: a rotor (as seen in Fig. 1, #17); and a fan housing (as seen in Fig. 1) having a base to receive the fan housing comprising: a main body (Fig. 4, #16); a first section disposed on the main body and having a through hole (Fig. 4a, #25); a second section (as seen in Fig. 4a) disposed on the main body, wherein a gap (Fig. 4a, #35) is formed in between the first and second sections; and a fixing portion (the radially innermost portion of the gap) formed in the gap; and a fastening structure passing through the first section via the through hole and having a part (Fig. 4a, #22) with a profile corresponding (or substantially equal as in claim 12) to that of the gap for precisely positioning the part in

Art Unit: 2834

the gap (as seen in Fig: 4b); wherein the second section prevents one end of the fastening structure from being exposed.

With respect to claims 2 & 13, Watanabe teaches the assembly of claims 1 & 12, wherein the fixing portion prevents the fastening structure from rotation and limits the position of the fastening structure.

With respect to claims 3 & 14, Watanabe teaches the assembly of claims 2 & 13, wherein the fastening structure includes a screw and the part is a nut disposed in the gap and having the profile substantially identical to that of the gap, the nut is aligned with the through hole by the fixing portion, the screw passes through the through hole and engages with the nut, and the first and second sections prevent the nut from moving along an axial direction of the screw.

With respect to claims 5 & 16, Watanabe teaches the assembly of claims 2 & 13, wherein the fastening structure has a profile corresponding to that of the fixing portion (as seen in Fig. 4b).

With respect to claims 6 & 17, Watanabe teaches the assembly of claims 1 & 12, wherein the main body is rectangular (as seen in Fig. 1), and the first and second sections, the fixing portion and the fastening structure are disposed at corners of the main body (as seen in Figs. 1 & 4).

With respect to claims 9 & 20, Watanabe teaches the assembly of claims 1 & 12, wherein the main body, the first and second sections and the fixing portion are an monolithic piece. The limitation of the monolithic piece (Fig. 4a) being formed by

Art Unit: 2834

injection molding is a method limitation given no patentable weight in an apparatus claim.

Claim 23 is rejected under 35 U.S.C. 102(b) as being anticipated by Tichy (DE 3809627). Tichy teaches an assembly comprising: a rotor (which inherently exists in the fan as taught by Tichy); a fan housing (Fig. 15, #16) receiving the rotor therein and having a main body with a first section (Fig. 15, #16A) having a hole (Fig. 8, #16B), and a second section (the uppermost lip of the motor housing), wherein a gap is formed between the first and second sections; and a fastening structure (Fig. 8, #14), having a hook (Fig. 8, #11), and joining the gap from outside of the fan housing (as seen in Fig. 8, a portion of the fastening structure (#11) is outside of the housing (#16)).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 4 & 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Watanabe et al. (JP 8-205450, previously cited) in view of Emberson (US 4099274). Watanabe teaches the assembly of claims 3 & 14, but it does not explicitly teach the second section having a recess aligned with the through hole of the first section, the screw being further accommodated by the recess. However, Emberson teaches a nut retaining fastening system (Fig. 2) comprising first and second sections having a gap

therebetween, wherein said second section includes a recess (Fig. 4, #84) aligned with the through hole (Fig. 2, #64) of the first section, a screw being further accommodated by the recess. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the second section of Watanabe in view of the recess as taught by Emberson because it provides an equivalent and equally well known means for retaining a nut for a fastening means that has the added benefit of providing a screw receiving aperture (Emberson, Col. 5, lines 19-42).

4. Claims 7 & 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Watanabe et al. (JP 8-205450, previously cited) in view of Tichy (DE 3809627). Watanabe teaches the assembly of claims 1 & 12, but it does not teach the part being a hook passing through the through hole and connected to the gap for mounting the fan housing on the frame in the system. However, Tichy teaches a hook (Fig. 8, #11) passing through a through hole (Fig. 8, #16B) and connected to a gap (Fig. 8, connected at location #6) for mounting a fan housing (Fig. 15, #16) on a frame (Fig. 8, #5). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the fastener of Watanabe in view of the hooks as taught by Tichy because they provide an equivalent and equally well known fastening means for use in mounting fans that has the added benefit of having damping and air-sealing properties (Tichy, Abstract).

5. Claims 10, 11, 21 & 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Watanabe et al. (JP 8-205450, previously cited) in view of Chung (US 5997265).

With respect to claims 10 & 21, Watanabe teaches the system of claims 1 & i2, but it does not explicitly teach a base at a bottom of the main body, wherein a plurality of ribs or stator blades are disposed between the base and the main body for guiding an air flow. However, Cheng teaches a fan with a base (Fig. 1, #11) at a bottom of a main body, wherein a plurality of ribs (Fig. 1, #121) or stator blades are disposed between the base and the main body for guiding an air flow. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the fan of Watanabe in view of the base and ribs as taught by Chung because it provides an extremely well known means for attaching a fan motor to its main body for air flow (Chung, Col. 2, Lines 31-35).

With respect to claims 11 & 22, Watanabe in view of Chung teaches the system of claims 10 & 21, and Chung teaches that the ribs or stator blades have the same inclined angle (as seen in Fig. 1).

Response to Arguments

6. Applicant's arguments filed 7/24/07 have been fully considered but they are not persuasive.

Regarding claims 1 and 12, The applicant's argument is on the ground that the reference the Examiner relies on, Watanabe, fails to show "the profile of the part (22) correspond to or substantially equal to that of the gap (35)" and "the second section prevents one end the fastening structure from being exposed".

The Examiner respectfully disagrees with the Applicant. Fig. 4b Watanabe clearly show the part with hexagon shape corresponds correspond to the shape of the

gap 35 so that the part slides in the gap in one direction without rotation. Fig. 4b shows the gap 35 is a little bit longer than it needs to accommodate part (22) because the drawing is not drawn on scale and the profile as seen in Fig. 4a is substantially equal to the gap. Moreover, the term "substantially" is a relative term which renders the claim indefinite. The term "substantially" is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention. The limitation does not require the part (22) having the profile exactly equal to the gap. It is noted that Fig. 5a of the present invention shows the fastening structure (54) having hexagon shape and the gap having a fraction of a washer shape and they are "substantially equal". Additionally, Fig. 4a and 5a clearly show the second section (on the left side of body 16) prevent one end of the fastening structure from being exposed because we can not see the nut (22) if we view it from the left side of the body (16).

Regarding the rejection of claim 23, Applicant's arguments is on the ground that Tichi fails to show "a fastening structure having a hook passing through the hole to connect the gap" because in Tichi, the hook (11) connects with the gap (6) within flange (5) and Tichi's structure does not have the gap between the first and second section.

The Examiner respectfully disagrees with the Applicant because Figs. 8 and 15 show the first section (16A) and the second section (5) are two separated parts and inherently they have a gap between them (even it is a very small gap) and Fig. 8 clearly show a fastening structure having a hook 14a passing through the hole to connect the gap from outside of the housing.

For the reasons explained above, the rejection is still deemed proper.

Conclusion

7. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Information on How to Contact USPTO

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hanh N Nguyen whose telephone number is (571) 272-2031. The examiner can normally be reached on Monday through Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Darren Schuberg, can be reached on (571) 272-2044. The fax phone numbers for the organization where this application or proceeding is assigned are (571) 273-8300 for regular communications and (571) 273-8300 for After Final communications.

Application/Control Number: 10/779,674

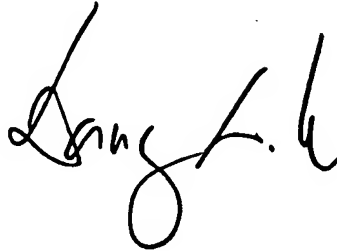
Page 9

Art Unit: 2834

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-1782.

HNN

October 12, 2007

A handwritten signature in black ink, appearing to read "Dangle". The signature is stylized with a large, looped "D" and a trailing flourish.

DANGLE
PRINTER

REPLACEMENT SHEET

Approved by
the Examiner HNN
10/12/07

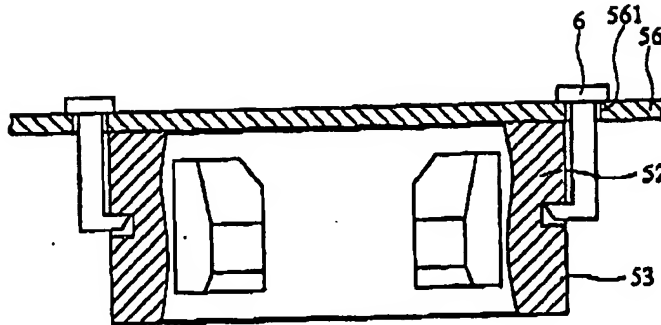


FIG. 8a

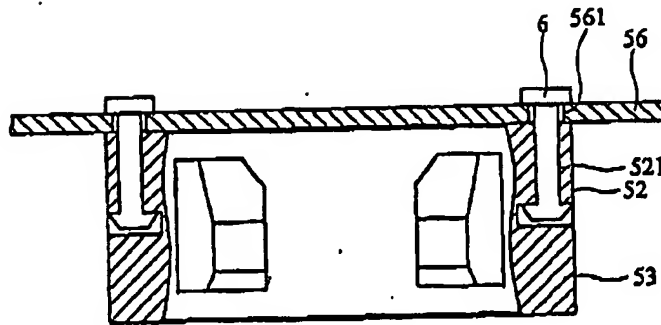


FIG. 8b